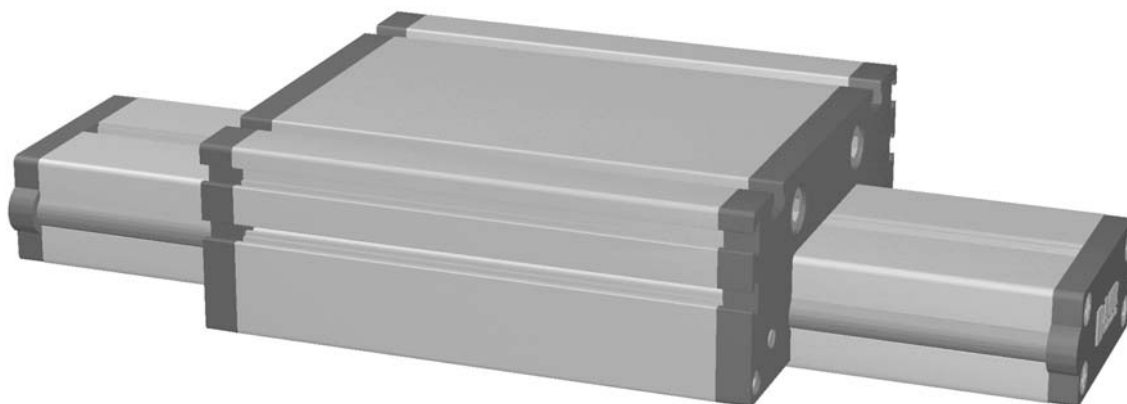


Positioning system E 40, 60, 80, 80S

Specifications

Roller guide unit without drive

2.1



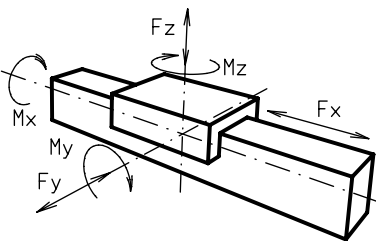
Function:

Very low building system achieved by an aluminium guide body with integrated, hardened steel guide rods. The carriage, which has internal linear ball bearings that can be adjusted free of play, moves along the body.

Fitting position: As required, max. length 6.000 mm.

Carriage connection: By T-slots.

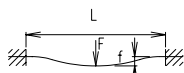
Unit mounting: By tapped holes in the mounting surface, bottom surface with T-slots.

Forces and torques	Size	E 40		E 60		E 80		E 80S	
	Forces/Torques	static	dynamic	static	dynamic	static	dynamic	static	dynamic
	F_x (N)	-	-	-	-	-	-	-	-
	F_y (N)	1200	700	3000	2000	3000	2000	4600	3600
	F_z (N)	900	650	1700	1100	1700	1100	3000	1800
	M_x (Nm)	25	20	67	43	90	55	170	140
	M_y (Nm)	32	18	90	70	110	80	270	230
	M_z (Nm)	35	25	120	100	150	120	300	220
All forces and torques relate to the following:									
existing values		$\frac{F_y}{F_{y_{dyn}}} + \frac{F_z}{F_{z_{dyn}}} + \frac{M_x}{M_{x_{dyn}}} + \frac{M_y}{M_{y_{dyn}}} + \frac{M_z}{M_{z_{dyn}}} \leq 1$							
values of table									
Speed									
max. (m/s)		4		5		6		8	
Geometrical moments of inertia of aluminium profile									
I_x mm ⁴		0,157x10 ⁵		1,71x10 ⁵		2,8x10 ⁵		2,8x10 ⁵	
I_y mm ⁴		0,654x10 ⁵		6,1x10 ⁵		10,59x10 ⁵		10,59x10 ⁵	
E-Modulus N/mm ²		70000		70000		70000		70000	

For life-time calculation of rollers use our CD-ROM or homepage!

Formula: E

$$f = \frac{F \cdot L^3}{E \cdot I \cdot 192}$$



- f = deflection (mm)
- F = load (N)
- L = free length (mm)
- E = elastic modulus 70000 (N/mm²)
- I = second moment of area (mm⁴)

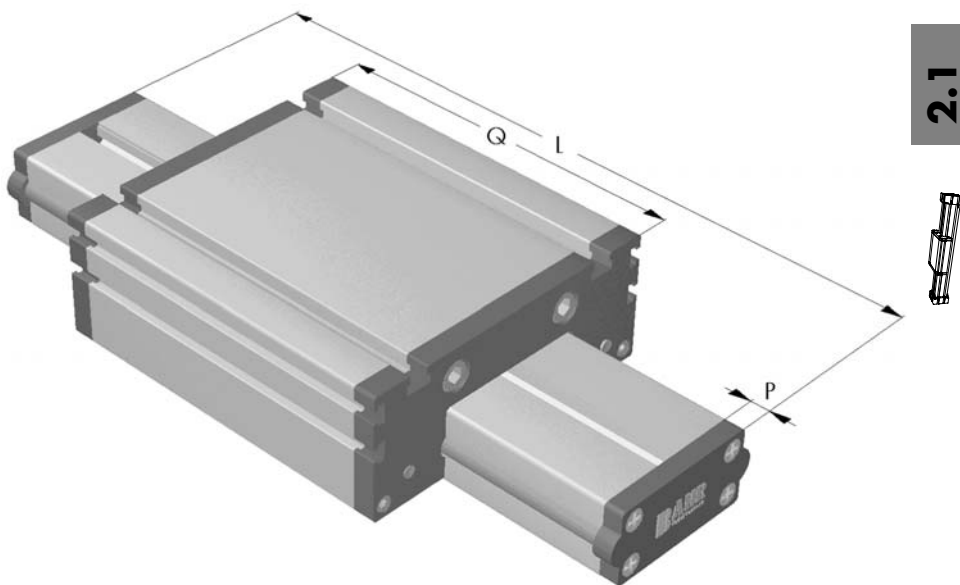
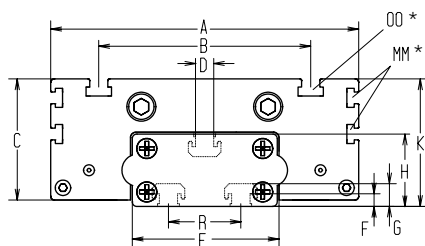


Positioning system E 40, 60, 80, 80S

Dimensions (mm)

Increasing the carriage length will increase the basic length by the same amount.

2.1



*For slide-nuts refer to chapter 2.2 page 2

Size	Basic length L	A	B	C	D	E	F	G	H	K	MM for	OO for	P	Q	R	Basic weight	Weight per 100 mm
E 40	136	100	66	34,5	10	40	7	12,5	22	37	-	M 6	6	122	-	1,0 kg	0,13 kg
E 60	186	144	96	48,0	10	60	7	12,5	30	49	-	M 8	8	168	-	2,2 kg	0,20 kg
E 80	215	170	117	66,5	10	80	7	12,5	40	70	M 6	M 10	10	194	40	3,4 kg	0,48 kg
E 80S	245	190	126	67,5	10	80	7	12,5	40	71	M 6	M 8	10	214	40	4,4 kg	0,48 kg

Choice of guide body profile:

- 0** (0) Standard (1) stainless guide rods (2) stainless guide rods and screws (3) stainless guide rods, rollers and screws

1500 Basic length + stroke = total length

E 40 0 0 0 0 0 0 0 0 1500

For combination kits and connecting elements refer to chapter 2.2

Sample ordering code:

E 40, non driven system, standard body profile, 1364 mm stroke

